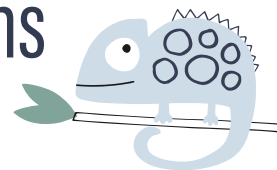


# Expanding and Factoring Linear Expressions



Use the distributive property to expand each expression.

$$6(f + 5) = \underline{6f + 30}$$

$$2(7x - 4) = \underline{14x - 8}$$

$$-3(-7n + 8) = \underline{21n - 24}$$

$$4(2a + 3b - 5) = \underline{8a + 12b - 20}$$

$$8(11u - 9v - 4) = \underline{88u - 72v - 32}$$

$$-7(3r - 7s + 6) = \underline{-21r + 49s - 42}$$

$$5(2.8k - 7.6) = \underline{14k - 38}$$

$$\frac{1}{2}(-6p + 8) = \underline{-3p + 4}$$

$$1.3(-8m + 2.2) = \underline{-10.4m + 2.86}$$

$$-8\left(\frac{1}{4}g - \frac{3}{4}h - 7\right) = \underline{-2g + 6h + 56}$$

Factor each expression. You can check your answer by distributing.

$$12f + 16 = \underline{4(3f + 4)}$$

$$25p - 35 = \underline{5(5p - 7)}$$

$$22v - 4 = \underline{2(11v - 2)}$$

$$14e + 63 = \underline{7(2e + 9)}$$

$$3y + 12z - 9 = \underline{3(y + 4z - 3)}$$

$$4r - 10s + 6 = \underline{2(2r - 5s + 3)}$$

$$8a - 12b + 2 = \underline{2(4a - 6b + 1)}$$

$$40m - 100n - 70 = \underline{10(4m - 10n - 7)}$$

$$36w - 24x + 30 = \underline{6(6w - 4x + 5)}$$

$$24c - 18d + 33 = \underline{3(8c - 6d + 11)}$$